



ThinkPad T420 Keyboard Replacement

Need to replace a faulty keyboard or remove it for fan access to clean the dust from the system?
This guide will show you how to remove the keyboard.

Written By: Nick



INTRODUCTION

If your Lenovo T420 has key or thermal issues, this guide will show you how to remove the keyboard to gain partial fan access or to replace a faulty keyboard.

Guide notes

- If you are removing the keyboard for fan access, blowing too much air into the heatsink in one shot (or being too close) can damage the fan. If the damage is particularly severe the system will give you a fan error and shut off to protect the processor (and dGPU, if equipped). If the system says **Fan error** when it is rebooted, the fan is damaged and will need to be replaced and the system will refuse to boot past this error. Use extra caution if you suspect the fan is failing prior to cleaning the heatsink. The fan in the author's system was rattling before I cleaned it and the issue has not come back since. **If the fan ends up getting damaged, this is NOT your fault; all you did was reveal the system needs a new fan.**
- If you are replacing the keyboard, check the Lenovo HMM to determine what keyboard you need. This can also be found on the back of your old keyboard as well.
- While this is not a hard repair, you may wish to sort your screws. Losing the silver screw under the RAM door can be a fatal mistake.
- Watch the ground on the chassis by the RAM door. This can get in the way or come loose from the chassis. If this happens push it back into place and it'll be almost as good as new.



TOOLS:

- [64 Bit Driver Kit](#) (1)
- [iFixit Opening Tools](#) (1)
- [Magnetic Project Mat](#) (1)

Optional - Not required, but recommended.

- [Canned Air](#) (1)

Optional - Only needed if you are cleaning the processor fan.

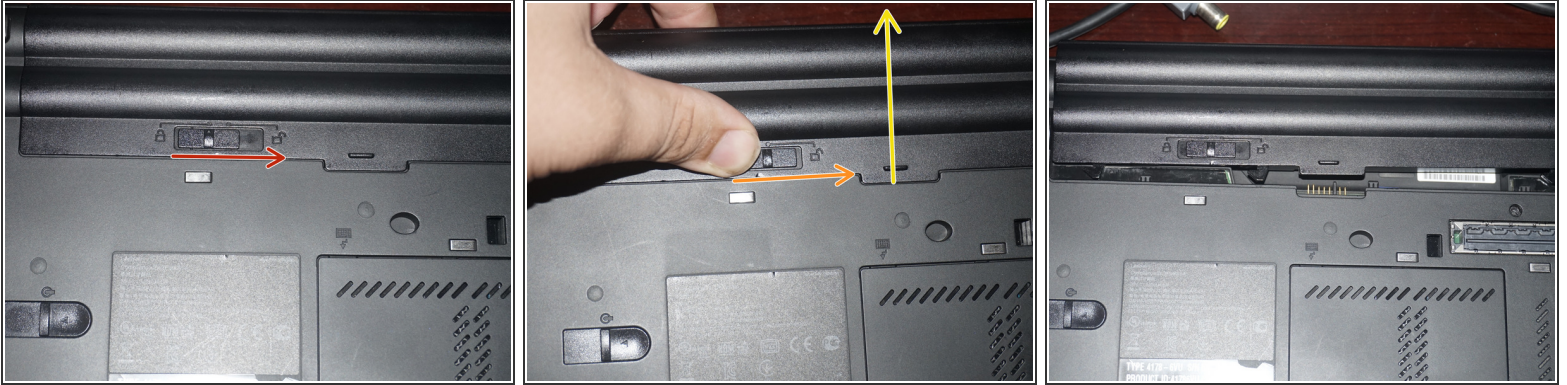


PARTS:

- [Keyboard](#) (1)

Find the Lenovo FRU in the HMM for your region.

Step 1 — Remove the battery



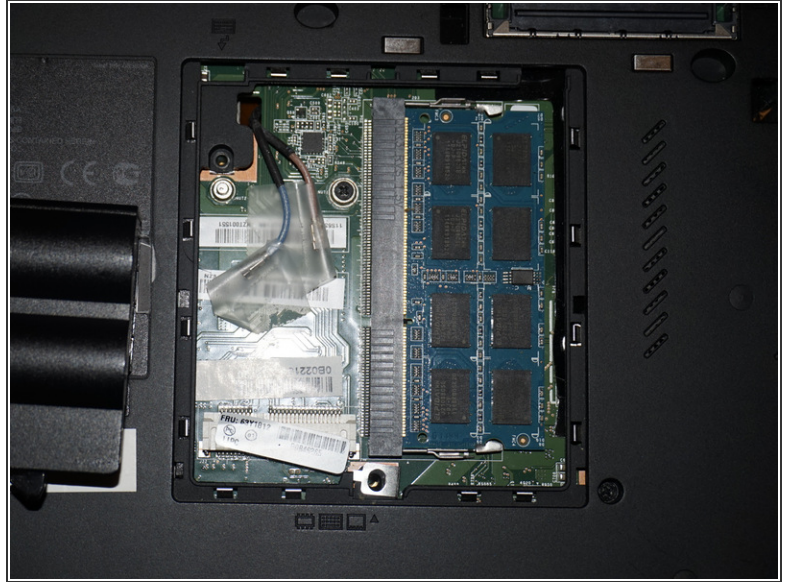
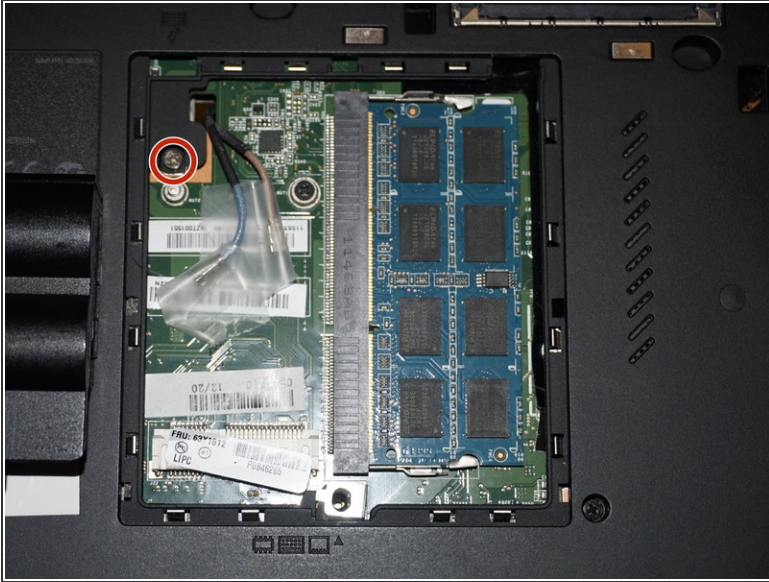
- Remove the battery from the system. To do this, push the locking tab to the unlocked position. Once the battery is unlocked, hold the button in the unlocked position and pull the battery out of the system.

Step 2 — Remove the RAM door



- To remove the RAM door, use a **Phillips #0** bit. Put the RAM door to the side.
- ⓘ Your computer will likely have plastic covers over the WWAN antennas. Mine are taped since I found a WLAN card installed here and did not have extra antenna covers.

Step 3 — Remove the keyboard screw



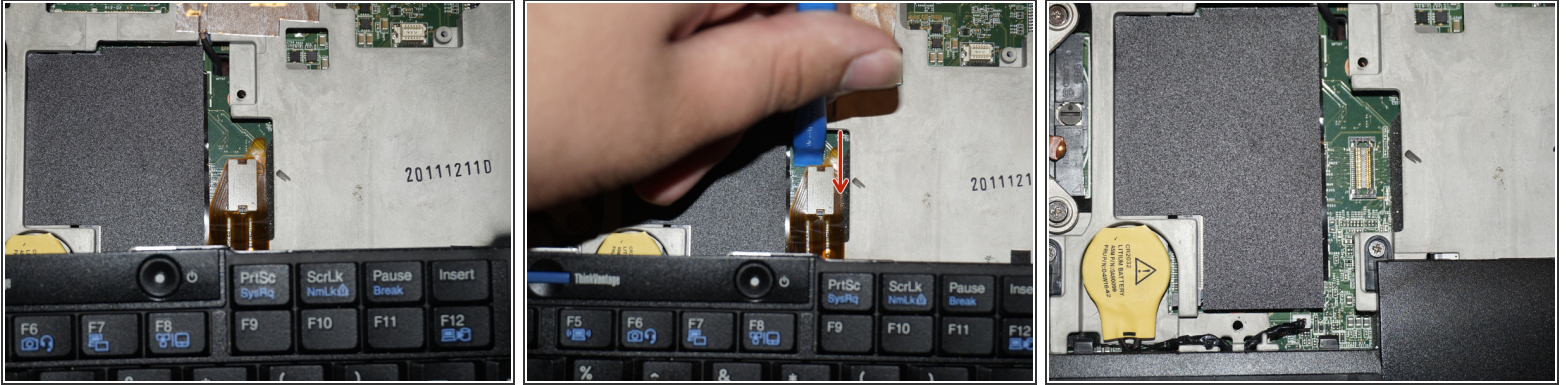
- To remove the keyboard, remove the one screw under the RAM door.
- ✦ A magnetic screwdriver is recommended. This screw has a tendency to not lift out with a non magnetic screwdriver.

Step 4 — Remove the keyboard



- To remove the keyboard, open the computer. Once it is open, lift the keyboard up. Start by lifting the keyboard up from the bottom and then loosen the keyboard with your plastic pry tool.
- Once the keyboard is loose, prepare the keyboard for removal.

Step 5 — Disconnect the keyboard



- Once the keyboard is removed from the system, disconnect the keyboard. To do this, use a plastic pry tool to disconnect the keyboard.
- ⓘ If you have a can of compressed air available, this is a good time to clean the dust from the fan and heatsink. To do this, spray the fins from the outside of the computer. If you do it this way, you should be able to clear out most of the dust in the heatsink.

Step 6 — Keyboard reinstallation



- To replace the keyboard, reconnect the keyboard to the motherboard. Once this is done, push the keyboard in top first.
- Once the keyboard is pushed in from the top, push down on the bottom. Once the bottom is pushed down, pull the keyboard down until the tabs that hold it in are no longer visible. Once this is done, replace the screw under the RAM door.

Step 7 — Keyboard FRU list

Arabic	45N2076	45N2148	45N2118	*
Belgian	45N2077	45N2147	45N2117	
Brazilian Portuguese	45N2075	45N2145	45N2115	
Bulgarian	45N2078	45N2148	45N2118	
Canadian French (D58)	45N2073	45N2143	45N2113	
Canadian French (Acort)	45N2072	45N2142	45N2112	
Danish	45N2079	45N2149	45N2119	
Dutch	45N2080	45N2150	45N2220	
Finnish, Swedish	45N2097	45N2167	45N2237	
French	45N2082	45N2152	45N2222	
German	45N2083	45N2153	45N2223	
Greek (U. S. English and Greek layout)	45N2084	45N2154	45N2224	
Hebrew	45N2085	45N2155	45N2225	
Hungarian	45N2086	45N2156	45N2226	
Icelandic	45N2087	45N2157	45N2227	
Indian	63Y0219	63Y0221	63Y0223	
Italian	45N2088	45N2158	45N2228	
Japanese	45N2102	45N2172	45N2242	
Kazakhstan	45N2089	45N2159	45N2229	
Korean	45N2103	45N2173	45N2243	
Latin American Spanish	45N2074	45N2144	45N2214	
Norwegian	45N2091	45N2161	45N2231	
Polish	45N2092	45N2162	45N2232	
Portuguese	45N2093	45N2163	45N2233	
Russian	45N2094	45N2164	45N2234	
Slovak	45N2095	45N2165	45N2235	
Slovenian	45N2096	45N2166	45N2236	
Spanish	45N2081	45N2151	45N2221	


Ungarian	45N2073	45N2143	45N2113
Canadian French (D58)	45N2073	45N2143	45N2113
Canadian French (Acort)	45N2072	45N2142	45N2112
Czech	45N2079	45N2149	45N2119
Danish	45N2080	45N2150	45N2220
Finnish, Swedish	45N2097	45N2167	45N2237
French	45N2082	45N2152	45N2222
German	45N2083	45N2153	45N2223
Greek (U. S. English and Greek layout)	45N2084	45N2154	45N2224
Hebrew	45N2085	45N2155	45N2225
Hungarian	45N2086	45N2156	45N2226
Icelandic	45N2087	45N2157	45N2227
Indian	63Y0219	63Y0221	63Y0223
Italian	45N2088	45N2158	45N2228
Japanese	45N2102	45N2172	45N2242
Kazakhstan	45N2089	45N2159	45N2229
Korean	45N2103	45N2173	45N2243
Latin American Spanish	45N2074	45N2144	45N2214
Norwegian	45N2091	45N2161	45N2231
Polish	45N2092	45N2162	45N2232
Portuguese	45N2093	45N2163	45N2233
Russian	45N2094	45N2164	45N2234
Slovak	45N2095	45N2165	45N2235
Slovenian	45N2096	45N2166	45N2236
Spanish	45N2081	45N2151	45N2221
Swiss	45N2098	45N2168	45N2238
Thai	45N2105	45N2175	45N2245
Traditional Chinese	45N2104	45N2174	45N2244
Turkish	45N2090	45N2160	45N2230

Swiss	45N2098	45N2168	45N2238
Thai	45N2105	45N2175	45N2245
Traditional Chinese	45N2104	45N2174	45N2244
Turkish	45N2090	45N2160	45N2230
U.K. English	45N2100	45N2170	45N2240
U.S. English	45N2071	45N2171	45N2241
U.S. English (International, with a Euro symbol)	45N2101	45N2171	45N2241

160 ThinkPad T420 and T420 Hardware Maintenance Manual

Table 11. Parts list—Keyboard (continued)

Language	FRU no.			CRU ID
Netherlands	45N2090	45N2160	45N2230	
Turkish (F Type)	60Y9552	60Y9554	60Y9555	

 Due to the use of multiple FRU numbers for the keyboard, I am not listing an FRU specifically. To identify the keyboard you need, refer to the [HMM](#) for additional information.